OR-9. POLYFLUOROALKYLATED 2,3-BUTANEDIONE-BASED LITHIUM DIKETONATES AS PROMISING BUILDING BLOCKS IN COORDINATION AND HETEROCYCLIC CHEMISTRY

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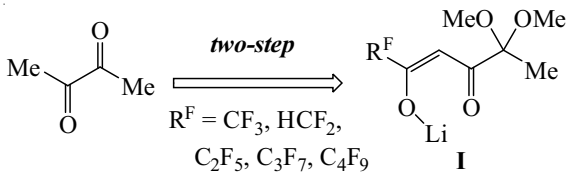
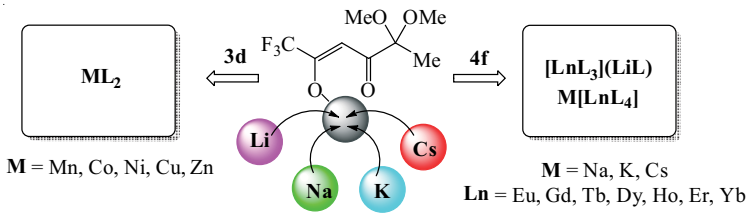
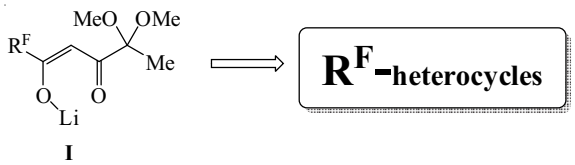
Chemistry of β-diketonates is huge and under constant development. We have proposed the approach to novel polyfluoroalkylated lithium 1,3-diketonates **I** based on 2,3-butanedione [1, 2].



The reported compounds can be effectively used in the synthesis of both coordination compounds and heterocyclic derivatives. Using trifluoromethyl-containing lithium diketonate **I** as a ligand we have obtained a number of 3d and 4f metal complexes [3, 4]. Some of heteronuclear $[LnL_3](LiL)$ complexes exhibited strong packing-controlled triboluminescence.



On the other hand, condensation of N-bifunctional nucleophiles with **I** or its derivatives is a simple and efficient method affording a wide range of fluoroalkylated five- or six-membered heterocycles [3, 5].



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